Name:

Teacher:

Honors Geometry, Period

**Honors Geometry**

HW #3: Intro to Patterns

Due: Monday August 31st

**Directions:** Failure to use complete sentences will result in LaSalle. Remember: WHY > HOW > WHAT. If you get stuck do not leave the problem blank, attempt the problem, write down questions/ reasons you are stuck.

1. **Filling Up:**

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| You arrive at a gas station and pay $50 for gas. This gives you 12.28 gallons of gas.   * What can you figure out from this information? * Can you determine the price of a gallon of gas? * Can you determine the capacity of your gas tank? |

1. **Earning Money:**

|  |
| --- |
| On the 8th day of summer, Ricky had $212 in his bank account. On the 40th day of summer, he had $852.   * How much money did he have on the 20th day? * After how many days would he have $1,000? |
| *What assumptions did you make when solving this problem? Explain.* |

1. **Tile Patterns:** Find the next 3 figures in each sequence. Can you find an explicit formula to match each sequence?

|  |  |
| --- | --- |
|  |  |
| Formula: | Formula: |

1. **Verbal Descriptions:** Find data tables and/or a function rule to fit the relationships described below:

|  |  |
| --- | --- |
| When *x* doubles, *y* doubles. | When *x* increases by 1, *y* doubles. |